

# V. A. D. C. G.

Vancouver Amateur Digital Communications Group

818 Rondeau Street, Coquitlam, British Columbia, Canada V3J5Z3

## Packet Radio Newsletter May 1980

The purpose of this newsletter is to keep supporters of the V.A.D.C.G. informed as to current progress and the state of packet radio in this area.

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### FIRST PUBLIC DEMONSTRATION

The first public demonstration of the V.A.D.C.G. packet radio system was held on April 26, 1980, at the CARF symposium in New Westminster.

### GENERAL MEETING & DEMONSTRATION

The next demonstration will take place at a general meeting that will be open to anyone interested in packet radio.

TIME : 8:00 PM, Wednesday, June 18, 1980

PLACE : Simon Fraser University, Room AQ 5030

This is on the 5th floor, North side, of the main building.

Note that the restricted parking signs are not valid at this time.

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### MAPLE RIDGE HAMFEST

Plans are now being made to have a display at the Maple Ridge Hamfest, July 5 and 6, 1980.

ARRL CONVENTION

An ARRL Amateur convention is planned for the last weekend of July, 1980, in Seattle, Wash. The possibility of operation from the convention site will be investigated.

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CURRENT ACTIVITYTWO METERS

Present two meter activity is mostly terminal-to-terminal, using AFSK at 1200 baud.

The frequency is 145.65 MHz simplex.

The station node is on at irregular intervals.

Current fund-raising is aimed at obtaining equipment to provide a continuous station node.

HF BEACON

A 20 meter beacon has been operated on 14.0765 MHz.

Transmissions, using HDLC protocol, were 35 seconds every 5 minutes.

The beacon has been heard across Canada and was usually a good signal into Ontario.

The possibility of linking local networks, via HF radio, is being actively investigated and looks promising.

At time of writing, the beacon transmitter is down for repairs.

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TERMINAL NODE CONTROLLER

The first run of 25 printed circuit boards, selling for \$30.00 each, is expected to be fully distributed this month. At time of writing, only 3 remained.

These boards are high quality glass, double-sided and through-hole plated.

If you want a board for the Terminal Node Controller, a deposit of \$30.00 will reserve one from the next run, which is yet to be ordered. If the price turns out to be more than \$30.00, you may pay the difference or have your deposit returned.

A full parts kit for the above board (not including the board itself) for serial interface, is available for \$285.00. The kit includes the full 4K of 2708 EPROM and 4K of 2114 RAM, as well as sockets for all ICs, and DB25 connectors.

The software for the terminal node has been tested.



#### WHAT DO YOU NEED?

A terminal node will consist of the following:

1. The terminal node board and kit described above.
2. A power supply, providing  $\pm 5$  volts and  $\pm 12$  volts for item 1.
3. A modem.
4. A 2 meter rig on 145.65 MHz.
5. A serial terminal, such as an ASCII or Baudot teletype, a keyboard and printer, or a computer, using RS232 or 20 mA loop.  
Inductive machines should use an opto-isolator.



#### WHAT NEXT?

1. Software to control gateways to host computers is under development.
2. Plans are under way to interface the network to a computer, in Washington State, hopefully within the next two months.
3. We are now looking for a suitable repeater site, which would allow coverage to the south.
4. Equipment optimization, to increase throughput on the channel by reducing turnaround time, is now in progress.
5. It should be possible to link the packet radio network to a regular RTTY network. Volunteers are needed to investigate this subject.

6. 220 MHz operation would permit faster data transfer.  
Help is needed for the development and/or evaluation of suitable wide-band receiving equipment and transmitters for 220 MHz.
7. A continuously-operating station node would allow the use of the packet radio system by anyone, at any time.  
This station will be set up as funds become available.
8. Local 2 meter or 220 MHz packet radio systems, in widely separated areas, could probably be linked via HF radio.  
Such a network of systems could conceivably become world-wide.

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#### WHEN

When will all this happen? It depends mostly on how many people want it enough to put in the time, the effort and the money required.

We now know that the system works and we know how much it costs. What many people may not realize is just how much it can do for them.

If you don't know come to the meeting on June 11 and find out.

If you like what you hear, get involved and help to get the complete system into operation.

If you want to help, call Doug Lockhart at 738-5683.

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## VALCC MAILING LIST

4/27/80

| NAME              | ORGANIZATION     | STREET | CITY           | PCODE | PHONE | SYS EXPDT | T SORT  |
|-------------------|------------------|--------|----------------|-------|-------|-----------|---------|
| A.M.R.A.D.        | C/O PAUL RINALDO |        | MCLEAN         | VA.   |       | C         | AMRA    |
| CLAYT ANGUISH     | VE3LU            |        | BRANTFORD      | ONT.  |       | \$10      | H ANGU  |
| STEWART BEAL      |                  |        | BURLINGTON     | ONT.  |       | \$10      | N BEAL  |
| DAVID BENNETT     | VE7AZG           |        | VANCOUVER      | B.C.  |       | \$10      | H BENN  |
| PETER BENNETT     | VE7CEI           |        | VANCOUVER      | B.C.  |       | \$10      | H BENN  |
| MEL BERNSTEIN     | VE7CEX           |        | RICHMOND       | B.C.  | 6800  | \$10      | H BERN  |
| ROBERT BLUMENKRAZ | VE7AVB           |        | RICHMOND       | B.C.  | 8080  | \$10      | H BLUM  |
| DAVE BOWMAN       |                  |        |                |       |       | 3         | B BWM   |
| CALGARY A.R.A.    | RTTY CHAPTER     |        | CALGARY        | ALTA. |       | \$10      | C CALG  |
| DAVE CAULKINS     | PCNET            |        | LOS ALTOS      | CA    |       | PET       | A CAUL  |
| RICHARD CHALK     | VE7BUT           |        | COQUITLAM      | B.C.  |       | H         | CHAL    |
| RICHARD CHYCOSKI  | VE7CVS           |        | COQUITLAM      | B.C.  | 8080  | \$20      | HB CHYC |
| MICHAEL CONNOLY   | VE3MDC           |        | WILLOWDALE     | ONT.  |       | \$10      | H CONO  |
| GEORGE CSERENYI   | VE7CIZ           |        | RICHMOND       | B.C.  |       | B         | CSEER   |
| WILLIAM T. DAVIS  | VE7ACJ           |        | BURNABY        | B.C.  |       | H         | DAVI    |
| FRED DENNERT      | VE7APT           |        | PRINCE GEORGE  | B.C.  |       | \$10      | H DENN  |
| PETER DRIESSEN    | VE7BBQ           |        | VANCOUVER      | B.C.  |       | H         | DRIE    |
| BOB FINCH         | WA7IPX           |        | BELLINGHAM     | WA.   |       | AM100     | B FINC  |
| NICHOLAS FONG     | VE7BAM           |        | BURNABY        | B.C.  | 8085  | \$10      | H FONG  |
| BRIAN FOX         |                  |        |                |       |       | B         | FOXX    |
| STEVE GERTSMAN    | VE7ZC            |        | RICHMOND       | B.C.  |       | H         | GERT    |
| MARTIN GUTHRIE    | VE3JCU/5         |        | SASKATOON      | SASK. |       | \$10      | HB HAWK |
| OWEN HAWKINS      | VE7AIV           |        | RICHMOND       | B.C.  |       |           |         |
| HORST HLADIK      | VE7AFW           |        | VANCOUVER      | B.C.  |       | H         | HLAD    |
| BRIAN HYNDMAN     |                  |        | PORT COQUITLAM | B.C.  | 8080  | \$10      | H HYND  |
| ALLAN JANISON     | VE7BRD           |        | N. VANCOUVER   | B.C.  |       | H         | JAMI    |
| JIM JOHNSON       | VE7CSJ           |        | SURREY         | B.C.  |       | H         | JOHN    |
| LARRY KAYSER      | VE3QB            |        | OTTAWA         | ONT.  |       | HB        | KAYS    |

CYRIL KNUDSON

VE7CDL

M. KOOMBES

H KOOMBE

ROB KUSE

H KUSE

ROBERT LIVINGSTON

\$20 HB LIVI

DOUGLAS LOCKHART

VE7APU

ALLEN MAR

\$30 HB LOCK

BRIAN MCINTOSH

\$10 HB MARR

RUSSELL MILLAND

VE3FVK

TOM MITCHELL

\$10 MILL

PHILIP MONCHAMP

H MITC

JOHN NIGHTINGALE

\$10 H MONC

DON OLIVER

VE7AOV

GLENN OLMAN

\$31 B NIGE

MAX PIZZOLATO

VE3DNM

RICK RICHARDSON

H PIZZ

DOUG RITCHIE

H RICR

TOM ROBSON

H RITC

ROBERT T. ROULEAU

VE2PY

ROBERT SKEGG

VE7AII

ROBERT SMITS

VE7EMD

JOHN SPRAGGS

VE7ADE

JIM SWETLIKOE

C/O C. PICKERING

TORONTO FM

CONCORD N.S.W. AUSTRALIA

WILLOWDALE ONT.

\$10 H SWE

\$15 C TORI

RON VANDERHELM

VE7COR

JOHN VANDENBERG

VE3DVW

IAN WHITE

VE7BDG

VANCOUVER B.C.

H KOOMBE

VANCOUVER B.C.

H KUSE

VANCOUVER B.C.

\$10 HB VAN

VANCOUVER B.C.

\$10 H WHI

# **PACKET**

## **RADIO NETWORK**

**You are invited to attend a  
lecture and demonstration on the**

**WED. 18<sup>th</sup> of JUNE , 1980.**

**PLACE:** ROOM AQ-5030 (main building) SIMON FRASER UNIVERSITY

**TIME:** 8:00 PM.

DATA MODULATION, TIME-DIVISION MULTIPLEXING,  
ASCII CODE, ERROR DETECTION AND CORRECTION,  
DATA RATES, BIT-ORIENTED PROTOCOL, NRZI,  
BIT INSERTION, SYSTEM SERVICES, NETWORKING,  
GATEWAYS, RELAY STATIONS, MESSAGE ROUTING,  
TERMINAL NODES, STATION NODES, SELF-CLOCKING,  
SYSTEM PROTOCOLS, TRANSPARENT DATA, CODE-  
TRANSLATION, DEVICE INTERFACES, etc. etc.

**THE VANCOUVER AMATEUR  
DIGITAL COMMUNICATIONS  
GROUP**

(604) 738-5683



ALLEN MAR  
VE7DPM

\$10

V5H 3C6